

Serial No. 10/762,963

PATENT

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FEB 11 2008

CLAIM AMENDMENTS

1. (Currently Amended) A prosthesis comprising a plurality of self expanding stents linked together by flexible links and defining an elongate substantially cylindrical lumen wall engaging surface and at least one of the stents having a bio-compatible graft material cover thereby defining a covered stent portion and an uncovered stent portion.
2. (Previously Presented) A prosthesis as in Claim 1 wherein the cover encompasses at least two of the plurality of stents and the cover is stitched or otherwise fastened to the stents in the covered stent portion.
- 3 and 4. (Cancelled)
5. (Previously Presented) A prosthesis as in Claim 1 wherein the uncovered stent portion extends away from the covered stent portion and the stents of the uncovered stent portion are linked by a thread or fibre threaded through bends of the stents.
6. (Previously Presented) A prosthesis as in Claim 5 wherein the thread or fibre is connected to each bend by a knot selected from a half hitch, a thumb knot, two half hitches or a clove hitch.
7. (Previously Presented) A prosthesis as in Claim 1 wherein a proximal end of the covered portion of the prosthesis includes barbs extending from a stent of the plurality of stents through the cover to engage with the wall of the lumen when deployed.
8. (Previously Presented) A prosthesis as in Claim 1 wherein there are at least three covered stents of the plurality of stents in the covered stent portion each of the stents being of the zig-zag type and constructed from stainless steel or Nitinol and up to eight or ten uncovered stents of the plurality of stents in the uncovered stent portion formed from stainless steel or Nitinol.

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9. (Original) A prosthesis as in Claim 1 wherein the uncovered portion is in the form of a self expanding spiral stent of zig-zag configuration.

10. (Currently Amended) A prosthesis for treatment of an aortic dissection comprising a substantially cylindrical body in an expanded state comprising at a proximal end thereof at least one self expanding stent covered by a bio-compatible graft material and an uncovered self expanding stent assembly extending from a distal end thereof wherein the uncovered self expanding stent assembly comprises self expanding stents linked together by flexible links.

11. (Previously Presented) A prosthesis as in Claim 10 further including barbs extending from a stent at the proximal end through the graft material.

12. (Original) A prosthesis as in Claim 10 wherein the self expanding stent assembly extending from a distal end of the biocompatible graft material is formed from a biocompatible and biodegradable mesh material.

13 – 16. (Cancelled)

17. (Previously Presented) A prosthesis comprising a covered portion defined by at least three self expanding stents within a tubular biocompatible graft material cover and an uncovered portion extending from one end of the covered portion, the uncovered portion being defined by a plurality of self expanding stents linked together by flexible links and defining an elongate substantially cylindrical lumen wall engaging surface.

18. (Previously Presented) A prosthesis as in Claim 17 wherein the tubular biocompatible graft material cover is stitched or otherwise fastened to the stents in the covered portion.

19. (Previously Presented) A prosthesis as in Claim 17 wherein the flexible links comprise a thread or fibre threaded through bends of the stents.

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20. (Previously Presented) A prosthesis as in Claim 19 wherein the thread or fibre is connected to each bend by a knot selected from a half hitch, a thumb knot, two half hitches or a clove hitch.
21. (Previously Presented) A prosthesis as in Claim 17 wherein one of the self expanding stents within a tubular biocompatible graft material cover includes barbs extending through the cover to engage with a wall of a lumen when deployed therein.
22. (Previously Presented) A prosthesis as in Claim 17 wherein the stents of the plurality of stents in the covered portion are of the zig-zag type and are constructed from stainless steel or Nitinol and the stents of the uncovered portion comprise eight to ten zig-zag stents and are formed from stainless steel or Nitinol.
23. (Previously Presented) A prosthesis as in Claim 17 wherein the uncovered portion is in the form of a self expanding spiral stent of zig-zag configuration.